



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/620,044

07/15/2003

Srivatsan D.

1-4-2-1-3

7525

7590
Ryan, Mason & Lewis, LLP
90 Forest Avenue
Locust Valley, NY 11560

07/20/2007

EXAMINER

SINKANTARAKORN, PAWARIS

ART UNIT

PAPER NUMBER

2616

MAIL DATE

DELIVERY MODE

07/20/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/620,044

Applicant(s)

D. ET AL.

Examiner

Pao Sinkantarakorn

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 May 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments, see page 10 line 26 – page 12 line 4, filed 5/14/2007, with respect to the rejection(s) of claim(s) 1, 18, and 19 under 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of newly found prior art rejection.
2. Claims 1-21 are pending. Claims 20 and 21 are newly added.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 19-21 are rejected under 35 U.S.C. 101 because it is directed to non-statutory subject matter.

Regarding claim 19 line 1-2, the recitation "a computer-readable storage medium containing one or more software programs" is non-statutory subject matter because it does not disclose executable programs; therefore, it does not have a tangible result. The same is true for claims 20 and 21.

Note: To overcome this rejection, it is suggested to the applicant to amend the claims to be written in terms of "computer readable medium, encoded with computer executable instructions."

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-5, 8-12, and 14-19 are rejected under 35 U.S.C. 102(e) as being anticipated by Erimli et al. (US 6,487,212).

Regarding claims 1, 18, and 19, Erimli et al. disclose a method of generating data traffic in a traffic generator, the method comprising the steps of:

generating a plurality of traffic flows (see paragraph 5 lines 6-23 and paragraph 6 lines 18-30, the switch includes a transceiver interface that transmits and receives data packets); and

associating each of the traffic flows with at least one of a plurality of output interfaces of the traffic generator such that each of at least a subset of the plurality of output interfaces has two or more of the traffic flows associated therewith (see paragraph 5 lines 6-23 and paragraph 6 lines 18-30, the switch transceiver outputs the packets to the appropriate end station via the network media; see Figure 1 reference numeral 17, each MAG has plurality of traffic flows associated with it);

regarding claim 2, at least one of the traffic flows is generated based on user selection of at least one of a protocol encapsulation (see column 5 line 24-30);

regarding claim 3, the output interfaces are associated with an output interface bus of the traffic generator (see Figure 1 reference numerals 16, 18, and 23));

regarding claim 4, the output interface bus is implemented as a software module representative of one or more physical connections;

regarding claim 5, each of the plurality of traffic flows maps to one of the output interfaces of the traffic generator and to an input interface of the traffic generator (see column 5 lines 6-50);

regarding claim 8, the traffic generator comprises a sequencer having a plurality of user-selectable sequencing processes associated therewith, a given one of the sequencing processes specifying an order of selection of items from a configuration list (see column 5 line 24-30, management counters);

regarding claim 9, the plurality of sequencing processes comprises a group sequencer which provides a correlative mapping between two or more configuration lists and their associated parameters (see column 5 lines 51-61);

regarding claim 10, information characterizing one or more of the traffic flows is stored as a traffic file in a memory associated with the traffic generator (see column 5 line 30-34, MIB);

regarding claim 11, the traffic file is represented as a string which includes a global header followed by one or more frames each having an associated frame header (see column 6 lines 18-45);

regarding claims 12 and 20, the global header comprises a type field indicating a type of traffic description used, and a clock speed field indicating a clock speed of the

Art Unit: 2616

associated output interface (see column 14 lines 33-37 and column 15 lines 27-30, 39-40);

regarding claim 14, the traffic generator comprises a hardware traffic generator (see column 5 lines 25-43);

regarding claim 15, the traffic generator comprises a software traffic generator (see column 5 lines 25-43);

regarding claim 16, the traffic generator comprises an element of a software-based development tool for simulating the operation of an electronic system (see column 6 lines 18-45);

regarding claim 17, the traffic generator is implemented primarily in software and is configured to generate data traffic files that are utilizable in another traffic generator implemented primarily in hardware (see column 5 lines 25-43 and column 6 lines 18-45).

Claim Rejections - 35 USC § 103

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Erimli et al. in view of Zhang et al. (US 2002/0129158).

Regarding claim 6, Erimli et al. disclose all the subject matter of the claimed invention except the method, wherein the traffic generator is operable in at least two phases, including a first phase in which a timestamp table is constructed based at least in part on user-selected configuration information, and a second phase in which packets are generated using the timestamp table constructed in the first phase.

However, the invention of Zhang et al. from the same or similar fields of endeavor disclose a method for constructing and associating a packet time stamp to the incoming packets (see paragraph 23);

Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to implement a method for constructing and associating a packet time stamp to the incoming packets as taught by Zhang et al. into the method of generating traffic flows of Erimli et al.

The motivation for implementing a method for constructing and associating a packet time stamp to the incoming packets is that it allows the apparatus to schedule the transmission of packets.

10. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Erimli et al. in view of Tallegas et al. (US 2002/0089929).

Regarding claim 7, Erimli et al. disclose all the subject matter of the claimed invention except the method, wherein the traffic generator comprises a pattern generator having a plurality of user-selectable pattern generation processes associated therewith, at least a given one of the processes generating a configuration list.

However, the invention of Tallegas et al. from the same or similar fields of endeavor disclose a method for generating a pattern and matching up between the incoming packets and a predetermined pattern (see paragraph 53);

Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to implement a method for generating a pattern and matching up between the incoming packets and a predetermined pattern as taught by Tallegas et al. into the method of generating traffic flows of Erimli et al.

The motivation for implementing a method for generating a pattern and matching up between the incoming packets and a predetermined pattern is that it increases the efficiency of the apparatus.

11. Claims 13 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Erimli et al. in view of Lee et al. (US 6,636,527).

Regarding claims 13 and 21, Erimli et al. disclose a method, wherein a given one of the frame headers comprises a flow identification field which identifies one or more traffic flows associated with the corresponding frame (see column 15 lines 5-8) and a length field indicating the length of the corresponding frame(see column 15 lines 27-30). Erimli et al. do not disclose a timing field indicating a time gap in clock cycles between the corresponding frame and a previous frame.

However, the invention of Lee et al. from the same or similar fields of endeavor disclose a method, wherein header comprises a guard time field (see column 3 lines 21-23).

Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to implement a method, wherein header comprises a guard time field as taught by Lee et al. into the method of generating traffic flows of Erimli et al.

The motivation for implementing a method, wherein header comprises a guard time field is that it allows the apparatus to avoid overlapping between frames.

Conclusion

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pao Sinkantarakorn whose telephone number is 571-270-1424. The examiner can normally be reached on Monday-Thursday 9:00am-3:00pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on 571-272-3139. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

PS



RICKY Q. NGO
SUPERVISORY PATENT EXAMINER